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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 09/881,599

Filing Date: June 14, 2001

Appellant(s): SOEPENBERG ET AL.

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Technology Center 2100

Steve Cha For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 7/30/2007 appealing from the Office action mailed 1/31/2006

# (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

# (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

# (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

# (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

# (8) Evidence Relied Upon

6,496,896	Inoue	12-2002
6,052,555	Ferguson	4-2000

# (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-3, 6-10, 12-16 and 18-22, 24 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat No 6,496,896 issued to Inoue (hereafter Inoue).

## Claims 1, 16, 22 and 25:

Inoue reads on the claimed invention as following:

wherein carousel-forming data file and directory objects are sent in cycles with predetermined groups of file and directory objects being formed into representative modules at the transmitter with each module being transmitted as a whole.

column 19, lines 27-30:

In the present specification, such a transmission system as just described is called "carousel system" from the similarity to a carousel, and a data transmission form as schematically represented in FIG. 8F is called carousel

column 19, lines 32-36:

Further, the "carousel system" is divided into two levels including a "data carousel system" and an "object carousel system." Particularly, in the object carousel system, objects having such attributes as a file, a directory, a stream and a service gateway are transferred as data using a carousel.

column 18, lines 60-67:

The module is mechanically divided into data units of a fixed length in principle called "block" as seen in FIG. 8D so that it may be transmitted in a form called section prescribed by the MPEG 2 format. However, the last block of the block need not necessarily have the prescribed fixed length. The reason why a module is divided into blocks resides in that the MPEG 2 format has a prescription that one section must not exceed 4 KB.

the receiver being arranged to store, for retrieval upon subsequent playback, received file data and directory objects under a predetermined grouping formulation, wherein the file and directory modules are comprised in discrete data portions carried in an elementary data stream

column 27, lines 55-65:

In particular, in the present embodiment, still picture data of a data file as AUX data are recorded in the form of a file compressed in accordance with the JPEG (Joint Photographic Coding Experts Group) system. The JPEG decoder 26 receives a file of still picture data reproduced from the disc 90 and stored, for example, in the buffer memory 13 through the memory controller 12, performs decompression processing in accordance with the JPEG system for the file, and outputs resulting data to the display section 24. Consequently, the still picture data as the AUX data are displayed on the display section 24.

with said predetermined grouping formulation for storage being at the module level including an indication for the interval in which they are valid

column 58, lines 25-35:

The producer Count register uses information of the size of data written by one writing processing operation as the size of data to be written into the segment buffer of the consumer by the producer. In other words, the producer performs processing of notifying the consumer of a size of data to be written into the segment buffer of the consumer by performing writing into the producer Count register.

col 58, lines 40-50:

The producer side determines an amount of data to be written by one writing operation in response to the contents having been written into the limit Count register in such a manner as described above and performs writing, for example, into the segment buffer of the producer itself. Then the contents written in the segment buffer are written into the consumer. This writing into the segment buffer corresponds to data transmission in Asynchronous communication.

## Claim 2:

Inoue discloses said transmitter comprising a connection to a source of data for transmission and data formatting means arranged to assemble into modules for transmission file data and directory objects [col 18, lines 46-67]

#### Claim 3:

Inoue discloses said receiver comprising means arranged to receive said transmitted modules and to store the file data and directory objects therein according to a predetermined grouping formulation [col 18, lines 46-67]

## Claims 6, 12 and 18:

Inoue discloses wherein the data including file and directory modules further comprises a version indicator to identify updates, with said modules further comprising discrete data portions

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carried in an elementary data stream, with said predetermined grouping formulation for storage being at the elementary level [col 19, lines 19-21]

## Claims 7, 13 and 19:

Inoue discloses wherein the file and directory modules are linked to time stamp data, with the transmitter being configured to include such time stamp data and the receiver component being arranged to recover such time stamps and utilize them in the reproduction from storage of the carousel [17, lines 50-60].

## Claims 8, 14 and 20:

Inoue discloses wherein the reproduction from storage of the carousel is performed at data rates other than that indicated by said time stamps [col 17, lines 60-61].

#### Claim 9, 15 and 21:

Inoue discloses wherein the reproduction form storage of the carousel is performed at data rates greater than that indicated by said time stamps by reproducing carousel data at a data rate indicated by time-stamp data and selectively interposing additional copies of reproduced carousel file and directory objects with said originally reproduced copies [col 17, lines 60-61]. 24-36].

# Claim 10 and 24:

Inoue discloses said transmitter comprising a connection to a source of data for transmission and data formatting means arranged to assemble into modules for transmission file data and directory objects [col 17, lines 30-32].

## Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue in view of US Pat No 6,052,555 issued to Ferguson, as best examiner is able to ascertain.

#### Claim 23:

Inoue discloses the elements of claim 22 as noted above.

Inoue fails to disclose wherein with respect to said predetermined grouping formulation, the elementary level corresponds to the lowest layer of an object carousel, with the top layer consisting of the file and directory objects and the middle layer consisting of modules.

Ferguson discloses wherein with respect to said predetermined grouping formulation, the elementary level corresponds to the lowest layer of an object carousel, with the top layer

consisting of the file and directory objects and the middle layer consisting of modules [col 3, lines 50-63].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inoue to include wherein with respect to said predetermined grouping formulation, the elementary level corresponds to the lowest layer of an object carousel, with the top layer consisting of the file and directory objects and the middle layer consisting of modules per applicant's admitted prior art for the purpose of defining layers for levels of abstraction [col 3, lines 59-63]. The ordinarily skilled artisan would have been motivated to improve Inoue's invention by providing an appropriate high speed large bandwidth data transport service [col 3, lines 45-48].

#### (10) Response to Argument

#### **Appellant Argues:**

Appellant states on page 9 "Contrary to the statements found in the Advisory Action and the Final Office Action, Inoue fails to describe "including an indication for the interval in which they [the stored data] are valid," as described in the claims.

#### **Examiner Responds:**

Examiner is not persuaded for the following reasons. The claim language "including an indication for the interval in which they are valid" pertains to a recording/reproduction system in which typically a magneto-optical disc is used. A user can record and reproduce audio signals such as tunes by downloading the audio signal from a website. A title, artist and images can also

be downloaded, recorded and reproduced on a display section of the reproduction apparatus. The program which the user is able to enjoy thus comprises both audio and visual program components.

Audio/visual/text data is conventionally collected and grouped together and stored as a file. A file is the basic unit of storage that enables a computer to distinguish one set of information from another. Appellant has failed to provide an explicit and deliberate definition of the word "interval" which is recited in claim 1. Therefore, examiner is required to give the word "interval" its broadest reasonable interpretation in light of the specification. Interval is defined as (1) a space between two things, a gap, distance, (2) a period of time between two points. The above definition shows that essentially "interval" denotes space or distance. One of ordinary skill in the art would recognize that "interval" when used in relation to the claimed "predetermined grouping formulation for storage" is referring to the space, distance or size of the storage required to store the claimed "data portions carried in an elementary stream." File size is defined as:

The length of a file, typically given in bytes. A computer file stored on disk actually has two file sizes, logical size and physical size. The logical file size corresponds to the file's actual size – the number of bytes it contains. The physical size refers to the amount of storage space allotted to the file on disk. Because space is set aside for a file in blocks of bytes, the last characters in the file might not completely fill the block (allocation unit) reserved for them. When this happens, the physical size is larger than the logical size of the file.<sup>2</sup>

The claim language "including an indication for the interval in which they are valid" thus essentially is referring to a size of a file which contains audio/visual/text data. The knowledge of the specifics of data storage such as in a disk system is necessary when considering the storage

<sup>&</sup>lt;sup>1</sup> Webster's New World College Dictionary, Fourth Edition

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of a file. Particularly, a sector is a portion of the data storage area on a disk. A disk is divided into sides (top and bottom, tracks (rings on each surface) and sectors (sections of each ring).

Sectors are the smallest physical storage units on a disk are of fixed size; typically, they are capable of holding 512 bytes of information apiece. Inoue's disclosure given below can be better understood when bearing in mind above details of data storage on a disk.

Inoue discloses in column 32, lines 54-58 the following:

Then at predetermined byte positions, data of a maker code, a model code, a track number (First TNO) of the first track, a track number (LAST TNO) of the last track, a sector use situation (Used sectors), a disc serial number, a disc ID and so forth are recorded.

Inoue discloses in column 34, lines 20-30 the following:

Referring back to FIG. 17, the pointers P-TNO1 to P-TNO255 indicate tracks of tunes or the like recorded on the magnet-optical disc 90 by a user. For example, the pointer P-TNO1 designates a part table which indicates a part or top one, with respect to time, of a plurality of parts in which data of the first track are recorded. For example, if a tune of a first track or a first program is recorded without being divided, that is, recorded in one part, on the disc, the recording area of the first track is designated with start and end addresses in a part table indicated by the pointer P-TNO1.

Inoue discloses in column 29, lines 1-20 the following:

In a recording track in the mini disc system, clusters CL are formed successively as seen in FIG. 13A, and one cluster makes a minimum unit upon recording. One cluster corresponds to 2 to 3 circumferential tracks. Referring to FIG. 13B, one cluster CL includes a linking area of four sectors SFC to SFF and a main data area of 32 sectors S00 to S1F. As seen from FIG. 13C, one sector is a unit of data including 2,352 bytes. Of the sub data area of four sectors shown in FIG. 13B, the sector SFF is used as a sub data sector which can be used for recording of information as sub data. However, the remaining three sectors SFC to SFE are not used for recording of data. Meanwhile, TOC (table of contents) data audio data, AUX data and o forth are recorded into the main data area for 32 sectors. It is to be noted that an address is recorded for each sector.

A second definition of the word "interval" is a period of time between two points. The following disclosure by Inoue teaches a period of time between two points.

<sup>&</sup>lt;sup>2</sup> Microsoft Computer Dictionary, Fifth Edition

Inoue discloses in column 11, lines 34-42, the following:

The MD recorder/player 1 can record or reproduce audio data onto or from a mini disc loaded therein. The MD recorder/player 1 further can record still picture data (a picture file) of an album jacket or the like and text data (a text file) of the words of a tune, a liner note and so forth incidental to audio data as main data onto a disc, and reproduce or output data such as a picture file, a text file, and so forth recorded on the disc in synchronism with a **reproduction time of the audio data from the disc**.

Inoue discloses in column 27, lines 35 - 40 the following:

The display section 24 displays an operational mode state of a disc being recorded or played back, a track number, a recording time or reproduction time, an editing operation state and so forth.

Inoue discloses, per the above an "interval" as interpreted as space, gap or distance in terms of first track, last track, clusters, sector use, start address and end address for a sector.

Inoue discloses, per the above an "interval" as interpreted as period of time between two points in time in terms of recording time and reproduction time.

Based on above evidence, examiner has shown that Inoue reads on the claim language "including an indication for the interval in which they [the stored data] are valid."

# **Appellant Argues:**

Appellant states in the fourth paragraph of page 11 "With regard to the invention as recited in claim 23, this claim depends from claim 22, which has been shown to include subject matter not disclosed by Inoue. The Office Action has failed to show how, and where, the Applicant's admitted prior art corrects the deficiency found to exist in the Inoue reference.

## **Examiner Responds:**

Examiner without agreeing or disagreeing with Appellant has deleted the rejection of claim 23 over Applicant's admitted prior art in view of Inoue. Appellant's comments are moot.

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**Appellant Argues:** 

Appellant states in the fourth paragraph of page 12 "With regard to the invention as

recited in claim 23, this claim depends from claim 22, which has been shown to include subject

matter not disclosed by Inoue. The Office Action has failed to show how, and where, Ferguson

corrects the deficiency found to exist in the Inoue reference.

**Examiner Responds:** 

Examiner is not persuaded. Appellant's assertion that the Inoue reference is deficient is

countered above. Furthermore, the reason for combining the Inoue and Ferguson references is

well documented in above Office action.

Still further, Examiner maintains that Inoue and Ferguson are concerned with the same

problem, i.e., video/audio data transmission and particularly video/audio data transmission via

data compression by means of MPEG compression. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to combine the teachings of Inoue and

Ferguson.

Inoue discloses in column 10, lines 55-65 the following:

Detailed Description Text (18):

In the present embodiment, video data transmitted from the audio additional information server 108 are compression coded in accordance with the MPEG (Moving Picture Experts Group) 2 system while audio data are compression coded in accordance with the MPEG 2 audio system. Meanwhile, audio data transmitted from the tune material server 107 are compression coded, for each audio channel, for example, in accordance with one of the MPEG 2 audio system and the

ATRAC (Adaptive Transform Acoustic Coding) system.

Ferguson discloses in the Abstract of the disclosure the following:

#### ABSTRACT:

MPEG compression for video/audio data is completed in real- or better than real-time by using computer processors in thousands of television receiver set-top boxes interconnected to a cable television network. The set-top boxes form a massively parallel, distributed computer network. MPEG compression for video/audio services is completed by partitioning the processing of video/audio frames into subtasks, and distributing these subtasks to set-top boxes that are not being used for subscriber services. After MPEG processing, the compressed video/audio frames are collected from the set-top boxes and are reconstructed into a compressed video/audio stream in the proper temporal order. If desired, the original video data can be JPEG-encoded prior to distribution to the individual set-top boxes, and then JPEG-decoded at the boxes. So doing reduces bandwidth constraints on the distribution network. Moreover, the lossy JPEG encoding/decoding process removes high frequency components from the original video data, facilitating and speeding the MPEG compression.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Conferees:

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